

```
C:\Users\Abdul-Aziz Tahil>docker network ls
NETWORK ID          NAME                DRIVER              SCOPE
9149f3bdb7ee        bridge             bridge              local
ce6ad30d2bc7        host               host                local
ac7ca17b85e4        none              null                local
```

### ---START OF EXERCISE 6---

```
C:\Users\Abdul-Aziz Tahil>docker run -dt ubuntu sleep infinity
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
345e3491a907: Pull complete
57671312ef6f: Pull complete
5e9250ddb7d0: Pull complete
Digest: sha256:adf73ca014822ad8237623d388cedf4d5346aa72c270c5acc01431cc93e18e2d
Status: Downloaded newer image for ubuntu:latest
464e6676b7819681e065a8cdced89d35a6042eef54cc5a6926471085d845aea6
```

```
C:\Users\Abdul-Aziz Tahil>docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "9149f3bdb7ee26ef2710071e1338ab195256837c11113cacfb5b94d25b412d11",
    "Created": "2021-06-11T04:37:55.7199786Z",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": null,
      "Config": [
        {
          "Subnet": "172.17.0.0/16",
          "Gateway": "172.17.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {
      "464e6676b7819681e065a8cdced89d35a6042eef54cc5a6926471085d845aea6": {
        "Name": "elastic_ride",
        "EndpointID": "a73f5d0e84d59b3e76ae4c0398c830a7a72fa3ce5df24f4c328b5153dd76ae02",
        "MacAddress": "02:42:ac:11:00:02",
        "IPv4Address": "172.17.0.2/16",
        "IPv6Address": ""
      }
    }
  }
]
```

```
},  
  "Options": {  
    "com.docker.network.bridge.default_bridge": "true",  
    "com.docker.network.bridge.enable_icc": "true",  
    "com.docker.network.bridge.enable_ip_masquerade": "true",  
    "com.docker.network.bridge.host_binding_ipv4": "0.0.0.0",  
    "com.docker.network.bridge.name": "docker0",  
    "com.docker.network.driver.mtu": "1500"  
  },  
  "Labels": {}  
}  
]  
]
```

C:\Users\Abdul-Aziz Tahir>docker ps

| CONTAINER ID | IMAGE  | COMMAND          | CREATED            | STATUS        | PORTS | NAMES        |
|--------------|--------|------------------|--------------------|---------------|-------|--------------|
| 464e6676b781 | ubuntu | "sleep infinity" | About a minute ago | Up 58 seconds |       | elastic_ride |

C:\Users\Abdul-Aziz Tahir>docker exec -it 464 /bin/bash

```
root@464e6676b781:/# apt-get update && apt-get install -y iputils-ping  
Get:1 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]  
Get:2 http://archive.ubuntu.com/ubuntu focal InRelease [265 kB]  
Get:3 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [27.6 kB]  
Get:4 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [876 kB]  
Get:5 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]  
Get:6 http://archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]  
Get:7 http://archive.ubuntu.com/ubuntu focal/main amd64 Packages [1275 kB]  
Get:8 http://archive.ubuntu.com/ubuntu focal/universe amd64 Packages [11.3 MB]  
Get:9 http://archive.ubuntu.com/ubuntu focal/restricted amd64 Packages [33.4 kB]  
Get:10 http://archive.ubuntu.com/ubuntu focal/multiverse amd64 Packages [177 kB]  
Get:11 http://archive.ubuntu.com/ubuntu focal-updates/restricted amd64 Packages [355 kB]  
Get:12 http://archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [979 kB]  
Get:13 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1299 kB]  
Get:14 http://archive.ubuntu.com/ubuntu focal-updates/multiverse amd64 Packages [32.0 kB]  
Get:15 http://archive.ubuntu.com/ubuntu focal-backports/universe amd64 Packages [4305 B]  
Get:16 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [323 kB]  
Get:17 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [729 kB]  
Fetched 18.0 MB in 17s (1065 kB/s)  
Reading package lists... Done  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
  libcapi2 libcapi2-bin libpam-cap  
The following NEW packages will be installed:  
  iputils-ping libcapi2 libcapi2-bin libpam-cap  
0 upgraded, 4 newly installed, 0 to remove and 5 not upgraded.  
Need to get 90.5 kB of archives.  
After this operation, 333 kB of additional disk space will be used.  
Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 libcapi2 amd64 1:2.32-1 [15.9 kB]  
Get:2 http://archive.ubuntu.com/ubuntu focal/main amd64 libcapi2-bin amd64 1:2.32-1 [26.2 kB]
```

```
Get:3 http://archive.ubuntu.com/ubuntu focal/main amd64 iputils-ping amd64 3:20190709-3 [40.1 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal/main amd64 libcap2 amd64 1:2.32-1 [8352 B]
Fetched 90.5 kB in 2s (52.0 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package libcap2:amd64.
(Reading database ... 4121 files and directories currently installed.)
Preparing to unpack .../libcap2_1%3a2.32-1_amd64.deb ...
Unpacking libcap2:amd64 (1:2.32-1) ...
Selecting previously unselected package libcap2-bin.
Preparing to unpack .../libcap2-bin_1%3a2.32-1_amd64.deb ...
Unpacking libcap2-bin (1:2.32-1) ...
Selecting previously unselected package iputils-ping.
Preparing to unpack .../iputils-ping_3%3a20190709-3_amd64.deb ...
Unpacking iputils-ping (3:20190709-3) ...
Selecting previously unselected package libpam-cap:amd64.
Preparing to unpack .../libpam-cap_1%3a2.32-1_amd64.deb ...
Unpacking libpam-cap:amd64 (1:2.32-1) ...
Setting up libcap2:amd64 (1:2.32-1) ...
Setting up libcap2-bin (1:2.32-1) ...
Setting up libpam-cap:amd64 (1:2.32-1) ...
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based frontend cannot be used. at /usr/share/perl5/Debconf/FrontEnd/Dialog.pm line 76.)
debconf: falling back to frontend: Readline
debconf: unable to initialize frontend: Readline
debconf: (Can't locate Term/ReadLine.pm in @INC (you may need to install the Term::ReadLine module) (@INC contains: /etc/perl /usr/local/lib/x86_64-linux-gnu/perl/5.30.0 /usr/local/share/perl/5.30.0 /usr/lib/x86_64-linux-gnu/perl5/5.30 /usr/share/perl5 /usr/lib/x86_64-linux-gnu/perl/5.30 /usr/share/perl/5.30 /usr/local/lib/site_perl /usr/lib/x86_64-linux-gnu/perl-base) at /usr/share/perl5/Debconf/FrontEnd/Readline.pm line 7.)
debconf: falling back to frontend: Teletype
Setting up iputils-ping (3:20190709-3) ...
Processing triggers for libc-bin (2.31-0ubuntu9.2) ...
root@464e6676b781:/# ping -c5 www.github.com
PING github.com (52.74.223.119) 56(84) bytes of data.

--- github.com ping statistics ---
5 packets transmitted, 0 received, 100% packet loss, time 4172ms

root@464e6676b781:/# exit
exit
```

```
C:\Users\Abdul-Aziz Tahil>docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS        PORTS        NAMES
464e6676b781   ubuntu   "sleep infinity"        6 minutes ago Up 6 minutes          elastic_ride
```

```
C:\Users\Abdul-Aziz Tahil>docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
delner/ping    1.0       db016eeb1ff6   12 hours ago   170MB
altador/ping    1.0       eabcd8772c39   14 hours ago   139MB
httpd          2.4       39c2d1c93266   2 weeks ago    138MB
ubuntu         16.04     9ff95a467e45   3 weeks ago    135MB
ubuntu         latest    7e0aa2d69a15   6 weeks ago    72.7MB
```

```
cmd: Command Prompt
spotify/kafka latest a9e0a5b8b15e 4 years ago 443MB

C:\Users\Abdul-Aziz Tahlil>docker stop 464e
464e

C:\Users\Abdul-Aziz Tahlil>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
464e6676b781   ubuntu    "sleep infinity"        9 minutes ago Exited (137) 6 seconds ago          elastic_ride
342d33f6ad4d   ubuntu:16.04 "/bin/bash"            12 hours ago  Exited (1) 12 hours ago          sad_mclean
6e0ce896ca1a   ubuntu:16.04 "/bin/bash"            15 hours ago  Exited (1) 15 hours ago          wizardly_greider

C:\Users\Abdul-Aziz Tahlil>docker run -it --rm delner/ping /bin/bash
Unable to find image 'delner/ping:latest' locally
docker: Error response from daemon: pull access denied for delner/ping, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.

C:\Users\Abdul-Aziz Tahlil>docker run -it --rm delner/ping:1.0 /bin/bash
root@0b90e79e54fe:/# ping google.com
PING google.com (142.250.199.78) 56(84) bytes of data.
^C
--- google.com ping statistics ---
6 packets transmitted, 0 received, 100% packet loss, time 5180ms

root@0b90e79e54fe:/# exit
exit

C:\Users\Abdul-Aziz Tahlil>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
464e6676b781   ubuntu    "sleep infinity"        11 minutes ago Exited (137) About a minute ago          elastic_ride
342d33f6ad4d   ubuntu:16.04 "/bin/bash"            12 hours ago  Exited (1) 12 hours ago          sad_mclean
6e0ce896ca1a   ubuntu:16.04 "/bin/bash"            15 hours ago  Exited (1) 15 hours ago          wizardly_greider

C:\Users\Abdul-Aziz Tahlil>docker run --rm -d --name dummy delner/ping:1.0
ef236690cb2890691d1e3a1db89a15736fec633b5876c2c4ee012ba43e1347c1

C:\Users\Abdul-Aziz Tahlil>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS          NAMES
ef236690cb28   delner/ping:1.0 "sleep infinity"        5 seconds ago Up 3 seconds          dummy

C:\Users\Abdul-Aziz Tahlil>docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "9149f3bdb7ee26ef2710071e1338ab195256837c11113cacfb5b94d25b412d11",
    "Created": "2021-06-11T04:37:55.7199786Z",
    "Scope": "local",
    "Driver": "bridge",
```

"sleep infinity" as command to keep it running in the background.

```
"EnableIPv6": false,
"IPAM": {
  "Driver": "default",
  "Options": null,
  "Config": [
    {
      "Subnet": "172.17.0.0/16",
      "Gateway": "172.17.0.1"
    }
  ]
},
"Internal": false,
"Attachable": false,
"Ingress": false,
"ConfigFrom": {
  "Network": ""
},
"ConfigOnly": false,
"Containers": {
  "ef236690cb2890691d1e3a1db89a15736fec633b5876c2c4ee012ba43e1347c1": {
    "Name": "dummy",
    "EndpointID": "1d55477e58a111748487b918c7dd78a739f04d1b773f5e8c32d31612dfef0fc4",
    "MacAddress": "02:42:ac:11:00:02",
    "IPv4Address": "172.17.0.2/16",
    "IPv6Address": ""
  }
},
"Options": {
  "com.docker.network.bridge.default_bridge": "true",
  "com.docker.network.bridge.enable_icc": "true",
  "com.docker.network.bridge.enable_ip_masquerade": "true",
  "com.docker.network.bridge.host_binding_ipv4": "0.0.0.0",
  "com.docker.network.bridge.name": "docker0",
  "com.docker.network.driver.mtu": "1500"
},
"Labels": {}
}
```

```
C:\Users\Abdul-Aziz Tahir>docker run --rm -d -e PING_TARGET=172.17.0.2 --name pinger delner/ping:1.0
832bc0b5eb804e4e00f7032fcc9fb1cd8adb9f75c1f20088c7310c78ada5217e
```

```
C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
832bc0b5eb80   delner/ping:1.0  "sleep infinity"        13 seconds ago Up 11 seconds          pinger
ef236690cb28   delner/ping:1.0  "sleep infinity"        45 seconds ago Up 43 seconds          dummy
```

```
C:\Users\Abdul-Aziz Tahir>docker logs pinger
```

Didn't display log files as command is sleep infinity.

```
C:\Users\Abdul-Aziz Tahir>docker run --rm -d -e PING_TARGET=dummy --name pinger delner/ping:1.0
```

```
Command Prompt
docker: Error response from daemon: Conflict. The container name "/pinger" is already in use by container "832bc0b5eb804e4e00f7032fcc9fb1cd8adb9f75c1f20088c7310c78ada5217e". You have to remove (or rename) that container to be able to reuse that name.
See 'docker run --help'.

C:\Users\Abdul-Aziz Tahil>docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
832bc0b5eb80   delner/ping:1.0  "sleep infinity"        About a minute Up About a minute    pinger
ef236690cb28   delner/ping:1.0  "sleep infinity"        2 minutes ago  Up 2 minutes             dummy

C:\Users\Abdul-Aziz Tahil>docker stop dummy
dummy

C:\Users\Abdul-Aziz Tahil>docker stop pinger
pinger

C:\Users\Abdul-Aziz Tahil>docker network create skynet
2269bf21c185b199f2f2681e26d60cea0408e16846210eaf813bc3eee677a6b0

C:\Users\Abdul-Aziz Tahil>docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
9149f3bdb7ee   bridge    bridge    local
ce6ad30d2bc7   host      host      local
ac7ca17b85e4   none      null       local
2269bf21c185   skynet     bridge    local

C:\Users\Abdul-Aziz Tahil>docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "2269bf21c185b199f2f2681e26d60cea0408e16846210eaf813bc3eee677a6b0",
    "Created": "2021-06-11T07:30:45.4078676Z",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.18.0.0/16",
          "Gateway": "172.18.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    }
  },
]
```

```
Command Prompt
"ConfigOnly": false,
"Containers": {},
"Options": {},
"Labels": {}
}
]

C:\Users\Abdul-Aziz Tahir>docker run --rm -d --network skynet --name dummy delner/ping:1.0
10edb565760b1fe9d860672eefd10390c58dbd22c4176345a8ebcaaad41e9bcc

C:\Users\Abdul-Aziz Tahir>docker logs pinger
Error: No such container: pinger

C:\Users\Abdul-Aziz Tahir>docker stop dummy
dummy

C:\Users\Abdul-Aziz Tahir>docker run --rm -d --name widgetdb --network skynet -p 5432 postgres
Unable to find image 'postgres:latest' locally
latest: Pulling from library/postgres
69692152171a: Already exists
a31b993d5cc6: Pull complete
f65921886500: Pull complete
b9c1a94e4ca8: Pull complete
435dd99ceb68: Pull complete
d3ee8e88c67c: Pull complete
84b08674f942: Pull complete
7d358e850d3e: Pull complete
c7dcc5801f3b: Pull complete
f6eeca01c79c: Pull complete
392faa2e3ddd: Pull complete
3e77feaf6319: Pull complete
9b42e6c9c7ba: Pull complete
5fce2660d75c: Pull complete
Digest: sha256:117c3ea384ce21421541515edfb11f2997b2c853d4fdd58a455b77664c1adc20
Status: Downloaded newer image for postgres:latest
dfd0559b44a320978068d900314b208d706d753af0d2a68254daa15d32e7e61a

C:\Users\Abdul-Aziz Tahir>docker run --rm -d --name gadgetdb --network skynet -p 5432 postgres
702dd0dda14422521205d7c178294ecb13e751d861ad9b13f637b72030271cbc

C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
C:\Users\Abdul-Aziz Tahir>docker ps -a
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS              NAMES
464e6676b781      ubuntu             "sleep infinity"    21 minutes ago     Exited (137) 11 minutes ago         elastic_ride
342d33f6ad4d      ubuntu:16.04       "/bin/bash"         13 hours ago       Exited (1) 13 hours ago             sad_mclean
6e0ce896ca1a      ubuntu:16.04       "/bin/bash"         15 hours ago       Exited (1) 15 hours ago             wizardly_greider
C:\Users\Abdul-Aziz Tahir>docker run --rm -d --name widgetdb --network skynet -p 5432 postgres
```

```
ca Command Prompt
8f7445e39914ed40a3c67c441160273c04302d6ab9af85971ab348f39dc04c5

C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES

C:\Users\Abdul-Aziz Tahir>docker run -d --name widgetdb --network skynet -p 5432 postgre
Unable to find image 'postgres:latest' locally
docker: Error response from daemon: pull access denied for postgres, repository does not exist or may require 'docker login': denied: requested access to the resource is denied.
See 'docker run --help'.

C:\Users\Abdul-Aziz Tahir>docker run -d --name widgetdb --network skynet -p 5432 postgres
38b4b4a548236f2d414af5b3d63c19150d1a73a2d2ac3f1721ad3c8032af11e9

C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES

C:\Users\Abdul-Aziz Tahir>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES
38b4b4a54823   postgres  "docker-entrypoint.s..."  8 seconds ago  Exited (1) 6 seconds ago  widgetdb
464e6676b781   ubuntu    "sleep infinity"         24 minutes ago  Exited (137) 14 minutes ago  elastic_ride
342d33f6ad4d   ubuntu:16.04  "/bin/bash"             13 hours ago  Exited (1) 13 hours ago  sad_mclean
5e0ce896ca1a   ubuntu:16.04  "/bin/bash"             15 hours ago  Exited (1) 15 hours ago  wizardly_greider

C:\Users\Abdul-Aziz Tahir>docker rm 38b4
38b4

C:\Users\Abdul-Aziz Tahir>docker run --rm -t -d --name widgetdb --network skynet -p 5432 postgres
39a39005e9127b8744aab82944aad3cf05179e6db78220cbaf4f89b62c18d035

C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES

C:\Users\Abdul-Aziz Tahir>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES
464e6676b781   ubuntu    "sleep infinity"         31 minutes ago  Exited (137) 22 minutes ago  elastic_ride
342d33f6ad4d   ubuntu:16.04  "/bin/bash"             13 hours ago  Exited (1) 13 hours ago  sad_mclean
5e0ce896ca1a   ubuntu:16.04  "/bin/bash"             15 hours ago  Exited (1) 15 hours ago  wizardly_greider

C:\Users\Abdul-Aziz Tahir>docker run -t -d --name widgetdb --network skynet -p 5432 postgres
cb77ad7e3957bc1434533f648f98589503756c313b1f2e728861a372648bcf73

C:\Users\Abdul-Aziz Tahir>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES
cb77ad7e3957   postgres  "docker-entrypoint.s..."  6 seconds ago  Exited (1) 4 seconds ago  widgetdb
464e6676b781   ubuntu    "sleep infinity"         33 minutes ago  Exited (137) 24 minutes ago  elastic_ride
342d33f6ad4d   ubuntu:16.04  "/bin/bash"             13 hours ago  Exited (1) 13 hours ago  sad_mclean
5e0ce896ca1a   ubuntu:16.04  "/bin/bash"             15 hours ago  Exited (1) 15 hours ago  wizardly_greider

C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS    NAMES
```

**Troubleshooting why widgetdb doesn't run in the background and container stops after running.**



```
C:\Users\Abdul-Aziz Tahir>docker start widgetb
Error response from daemon: No such container: widgetb
Error: failed to start containers: widgetb
```

```
C:\Users\Abdul-Aziz Tahir>docker start cb77
cb77
```

```
C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS      NAMES
```

```
C:\Users\Abdul-Aziz Tahir>docker rm cb77
cb77
```

```
C:\Users\Abdul-Aziz Tahir>docker run --rm -it -d --name widgetdb --network skynet -p 5432 postgres
5e159de6e577a13e26c36faf6709c75632e750ee3d7015d13b5a17298b62e460
```

```
C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS      NAMES
```

```
C:\Users\Abdul-Aziz Tahir>docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS      NAMES
464e6676b781   ubuntu    "sleep infinity"        37 minutes ago    Exited (137) 27 minutes ago    elastic_ride
342d33f6ad4d   ubuntu:16.04 "/bin/bash"            13 hours ago      Exited (1) 13 hours ago      sad_mclean
6e0ce896ca1a   ubuntu:16.04 "/bin/bash"            15 hours ago      Exited (1) 15 hours ago      wizardly_greider
```

```
C:\Users\Abdul-Aziz Tahir>docker run --rm -d --name widgetdb --network skynet -p 5432 postgres sleep infinity
1cd63b9afd3665301b23b9df3dd947b317b76a5721ff04c039cbe7450c7ff3d7
```

```
C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS      NAMES
1cd63b9afd36   postgres  "docker-entrypoint.s..." 4 seconds ago    Up 2 seconds    0.0.0.0:53224->5432/tcp    widgetdb
```

```
C:\Users\Abdul-Aziz Tahir>docker run --rm -d --name gadgetdb --network skynet -p 5432 postgres sleep infinity
fc8f8fb578c85c9b2defd4b69ae1e856fcc5afcd25064d66e6fc8fa2fa64b268
```

```
C:\Users\Abdul-Aziz Tahir>docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED    STATUS    PORTS      NAMES
fc8f8fb578c8   postgres  "docker-entrypoint.s..." 16 seconds ago    Up 13 seconds    0.0.0.0:53225->5432/tcp    gadgetdb
1cd63b9afd36   postgres  "docker-entrypoint.s..." 38 seconds ago    Up 36 seconds    0.0.0.0:53224->5432/tcp    widgetdb
```

```
C:\Users\Abdul-Aziz Tahir>docker exec -it widgetdb /bin/bash
root@1cd63b9afd36:/# psql -U postgres
psql: error: could not connect to server: No such file or directory
Is the server running locally and accepting
connections on Unix domain socket "/var/run/postgresql/.s.PGSQL.5432"?
root@1cd63b9afd36:/# psql -U postgres -h gadgetdb
psql: error: could not connect to server: Connection refused
Is the server running on host "gadgetdb" (172.18.0.3) and accepting
TCP/IP connections on port 5432?
root@1cd63b9afd36:/# exit
```

**Used sleep infinity to keep the widgetdb and gadgetdb running in the background.**

exit

```
C:\Users\Abdul-Aziz Tahil>docker stop widgetb gadgetb
Error response from daemon: No such container: widgetb
Error response from daemon: No such container: gadgetb
```

```
C:\Users\Abdul-Aziz Tahil>docker stop gadgetdb widgetdb
gadgetdb
widgetdb
```

```
C:\Users\Abdul-Aziz Tahil>docker run --rm -d --name widgetdb --network skynet -p 5432:5432 postgres sleep infinity
cc7368ac79e305b9d9c94e442c88f96f49e1feebed179563f3bd939bd5280e4e
```

```
C:\Users\Abdul-Aziz Tahil>psql -U postgres -h localhost
psql' is not recognized as an internal or external command,
operable program or batch file.
```

**psql not installed**

```
C:\Users\Abdul-Aziz Tahil>docker stop widgetdb
widgetdb
```

```
C:\Users\Abdul-Aziz Tahil>
```

**---END OF EXERCISE 6---**